

CHILDREN AS PARTNERS IN NEIGHBORHOOD PLACEMAKING: LESSONS FROM INTERGENERATIONAL DESIGN CHARRETTES

SHARON EGRETTA SUTTON AND SUSAN P. KEMP

University of Washington

Abstract

This paper investigates how children can be engaged as active participants in neighborhood placemaking through the use of a *design charrette*, an intensive, hands-on workshop in which designers and citizens collaborate to solve a community design problem. The charrette methodology has been reconceptualized through the lens of new theoretical perspectives on children, social justice, and spatiality to encompass intergenerational, interskill, and inter-institutional participation. A formative evaluation of two design charrettes provides lessons on the benefits of and barriers to bringing 4th–5th and 9th–12th graders into a partnership with university students, design professionals, and community constituents. Benefits to younger participants included indications of social and environmental awareness, evidence of environmental competence, and opportunities to influence public decision-making. Barriers included the difficulties all parties experienced in taking new social roles, realizing new learning modes (including the design process), and overcoming institutional hierarchies. A six-level scaffold of interdependent adult and institutional support is proposed to facilitate children's neighborhood placemaking.

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When we enter human life, it is as if we walk on stage into a play whose enactment is already in progress—a play whose somewhat open plot determines what parts we may play and toward what denouements we may be heading. Others on stage already have a sense of what the play is about, enough of a sense to make negotiation with a newcomer possible (Bruner, 1990, p. 34).

While residential environments are central to the development of younger children, neighborhoods take on increasing importance as children mature and extrafamilial influences increase. It is within neighborhoods that children first enter upon the stage of public life, developing a narrative with their peers and with adults outside their families about how life should proceed. Ideally, the social networks and physical spaces of neighborhoods help children try out varied social roles; learn to engage with cultures, lifestyles, and belief systems that are unlike their own; and develop consistent patterns of behavior by creating supportive interconnections between families, schools, and community institutions. Such neighborhoods can enhance children's communication skills, sense of self, and social competence (Wohlwill & Heft, 1987; Garbarino, 1985),

while helping them imagine alternative futures for themselves (Sutton, 1996).

Neighborhoods can also be a source of inequality that becomes more relevant as children mature (Brooks-Gunn *et al.*, 1993). Because real estate value is related to a location's physical infrastructure, deteriorating neighborhoods are ones of last resort for impoverished racial and ethnic minority families with the fewest choices. Children growing up in these neighborhoods are disadvantaged by inadequate housing, lack of safe open space, poor schooling, isolation from social networks, and a myriad of other problems associated with poverty. Since children are astute observers of their surroundings (Lynch, 1979), it seems reasonable to believe that their segregation in dilapidated surroundings can intensify their disadvantaged cultural and socioeconomic position, both substantively and symbolically. At the same time, impoverished children are often seen as culprits who contribute to the unsavoryness of their communities through asocial behavior. As children move into public life in these economically disenfranchised neighborhoods, the roles of victim and villain become increasingly potent identifiers (Valentine, 1996).

Clearly, children's experiences in the mesoenvironment of schools and neighborhoods reflect—and reinforce—larger societal realities. Children learn who they are and can become through complex transactions that have spatial and relational dimensions. Positive sociospatial transactions are critical to children's maturation as *engaged citizens*, defined as persons who can participate in civic dialogue and take collective action on behalf of their communities (Lappé & DuBois, 1994; Schneekloth & Shibley, 1995). Children do not magically attain such capacities but rather need sustained opportunities for practicing participative habits of mind. In this article, we explore how children can assume roles as competent, participating citizens within their neighborhoods. In particular, we are interested in the stage for civic activism that is created as children and adults *intentionally* seek to transform their neighborhoods. We refer to such intentional processes as 'placemaking,' in lieu of the more frequently used term 'community planning and design,' because it best describes our interest in linking spatial interventions with individual agency and institutional supports.

We propose a particular placemaking venue for nurturing children's participation, namely an intensive hands-on workshop, called a *design charrette*, in which designers and citizens collaborate to solve a community design problem. We have reconceptualized the charrette as a methodology for engaging children in civic dialogue that also transforms social and institutional norms. We became intrigued by this methodology because the stylized, goal-oriented rituals of the charrette create a business-is-not-as-usual space, which encourages participants to experiment with new roles and ways of thinking.

Our approach rests upon three assumptions about children, social justice, and spatiality. First, we take the position that children are autonomous social agents, in contrast to the more typical view of them as 'adults-in-waiting' (Wyness, 1999). The tendency to see children as *becoming* rather than *being* reinforces a paternalistic view of children as vulnerable and in need of adult protection (Simpson, 1997). It focuses attention on achieving developmental outcomes for the future, rather than on children's capacity to contribute to the present (James *et al.*, 1998). Yet, 'children are not simply cultural novices enroute to adult level mastery of cultural knowledge. They are producers of culture in their own right' (Goodnow *et al.*, 1995, p. 43). Our charrette methodology posits that children are 'citizens presently capable of participating in community affairs' (Simpson, 1997, p. 908). Since the charrettes in-

cluded 9–11- and 14–18-year-olds, we use the term 'children' to refer to 'those who have not yet reached full intellectual or social maturity' (Simpson, 1997, p. 908), a definition that recognizes the evolving nature of children's capacities and the differing levels of adult guidance needed for those capacities.

Second, our work posits that children's participation is a central, if neglected, factor in social justice (See e.g. Bojer, 2000). Although children are not fully matured, they still have a right to influence decisions that affect their lives (Hart, 1997; Simpson, 1997). Yet more often than not, children are invisible in public life and social decision-making, regardless of their socioeconomic status. They are segregated into specialized spaces, excluded from or highly regulated within adults' domain; in both circumstances they lack opportunities to influence their surroundings 'which are frequently segregated by race, class, age, and function' (Sutton, 1996, p. 155). These realities profoundly affect children's access to the freedoms of democratic society. When children are excluded from public life, not only are they denied their rights of citizenship in the present but their marginality as civic actors during childhood compromises their ability to acquire the self-perceptions and competencies of adult citizenship—a marginality that is greatly magnified for children who are already distanced from the mainstream due to poverty, race, or ethnicity.

The third aspect of our conceptual framework is predicated upon a view of social justice that more fully attends to spatiality as a factor in disempowerment and exclusion. Prevailing paradigms of social justice frequently treat space as a background for inequities rather than as a foreground in which different social groups have access to vastly unequal locations (Matthews & Limb, 1999) and to the social capital associated with those locations (Stanton-Salazar, 1997). Given the barriers to systemic change, it is not surprising that interventions into the outcomes of place-based inequities often focus on changing individuals and families rather than on a restructuring of the landscape (Wiley & Rappaport, 2000).

The links between spatiality and social justice are particularly weak with regard to children. Despite the relevance of the physical environment in children's lives, a gap exists in our understanding of how neighborhoods help shape the roles children adopt as they move into adulthood. Little attention has been paid to children's perceptions of their neighborhoods (Burton & Price-Spratlen, 1999) or to their changing developmental needs as spatial actors, further marginalizing youth in places that

reflect the worldview not only of adults (Hart, 1992) but of the most privileged adults (Matthews & Limb, 1999). The gap in knowledge about how children experience place-based inequities is greatest for impoverished racial and ethnic minority youth because even less attention has been paid to the particular challenges of growing up within a racialized society (Stanton-Salazar, 1997). Children's experiences in place *and* as place makers are thus vital components of social justice. When theorized through the lens of social justice, the charrette offers a methodology for bringing children and adults together to imagine landscapes that enhance social and ecological relationships.

In the literature review that follows, we provide theoretical justification for children's participation in placemaking and explore developmentally and contextually appropriate placemaking practices. In the body of the paper, we present evaluative data from two intergenerational design charrettes, conducted in different communities over a two-year period. We conclude with a discussion of the lessons learned from the charrettes and offer a model for future theory and practice.

Theorizing children's participation in neighborhood placemaking

The benefits of children's placemaking

Engaging children and youth in experiential learning enhances their sense of community, place, and belonging, as well as enhancing their lives. They learn that they have something to contribute and that they have the opportunity to participate in making a qualitative difference in shaping the places where they live (Mullahey *et al.*, 1999, p. 6).

The physical environment serves as a dynamic context for human life, shaping behavior and affecting our thoughts, feelings, social interactions, physical well-being, and sense of self (Hutchison, 1999). Places provide shelter, but they also afford an invisible glue for human experience (Rivlin, 1982). The meanings they have, and our attachment to them, derive from our relationship to those places through personal, group, and cultural processes (Rivlin, 1982). Participation in constructing one's surroundings heightens the meaning places have by giving people a sense of control and by enhancing their awareness of environmental issues (Sanoff, 2000). 'The making of places...not only changes and maintains the physical world of living; it also is a way we

make our communities and connect with other people' (Schneekloth & Shibley, 1995).

Placemaking has benefits for children, especially those who are alienated from their surroundings or from mainstream channels of achievement. As part of a school curriculum, placemaking can help students develop creative thinking (Davis *et al.*, 1997; Taylor, 1989); the ability to make aesthetic judgments (Adams & Chisholm, 1999); critical awareness of social inequities (Sutton, 1992); communication and interpersonal skills (Sutton, 1989); and the ability to plan and bring about change (Mullahey *et al.*, 1999). Although empirical evidence to link such activities to improved academic performance is lacking, abundant anecdotal evidence suggests that children who are involved in participatory practices experience empowerment and reduced alienation (Sanoff, 2000) when they work within developmentally appropriate structures that promote a sense of group membership and accountability (Heath, 1991). In studies of adults, a robust body of evidence indicates that opportunities for control, participation, and self-determination are linked to enhanced well-being and quality of life (Ryan & Deci, 2000; Thompson & Spacapan, 1991); conversely disempowerment and lack of control are linked to decreased mental health and well-being (Moane, 1999). Although similar studies of children are sparse, those that do exist point to similar outcomes (Prilleltensky *et al.*, 2001; Rutter, 1987).

Placemaking also heightens children's mastery over their environment, acting as a counterbalance to the increased adult monitoring of their behavior that results as children spend more time at school and staff become more accountable for maintaining their safety. Outside school, the lack of pedestrian amenities and parental responses to dangers on the street are also supplanting children's self-directed activities with adult-designed activities occurring in adult-designed institutions. Since 'children have a very strong affective sense of their everyday world, which is often in sharp contrast to that shared by adults' (Matthews & Limb, 1999, p. 77), they are doubly marginalized by the loss of freedom to explore their neighborhoods. Structured placemaking activities can provide a vital substitute for the natural processes through which children have developed environmental competence since the beginning of time.

Finally, placemaking can help children develop a sense of caring for the planet and its ecosystems. 'Children of the 1990s have entered the world at a point in history when many nations are radically reassessing their use of natural resources and the

role of citizens in managing the environment' (Hart, 1997, p. 3). Planning and designing the environment is an ideal domain in which to develop children's activism as the physical world seems easier to understand than many social problems (Hart, 1997). Since socioeconomically disadvantaged children are more likely to be exposed to environmental degradation, they also have the most to gain from learning sustainable placemaking practices.

Developmentally and contextually appropriate placemaking practices

Because spatial range and perceptions of safety vary with age, gender, social class, and geographic locale (Burton & Price-Spratlen, 1999; Matthews & Limb, 1999), children's perceptions of, and experiences in, their neighborhood vary. For this reason, placemaking activities should begin with strategies that document participants' perceptions of their neighborhood and their behavior patterns within it. Ethnographic research tools that are especially useful include cognitive maps (Halseth & Doddridge, 2000), neighborhood walks (Bryant, 1985), and analyses of aerial and at-grade photographs.

Children's capacities to influence their surroundings also modulate over time. Developmental theories suggest 'two periods of identity development that are relevant to children's community participation: childhood and adolescence' (Hart, 1997, p. 28), each requiring a different level of adult support. However, young people's capacities may exceed adult expectations (Matthews, 1992), especially since participation can in itself extend competence. 'What children can handle at a certain moment in their development is not a constant factor, but is partly the result of the space for learning and experiencing offered to them....By involving children from a very early age in the organization of the world in which they live, their repertoire of behavioral capabilities grows' (De Winter, 1997, p. 163, cited in Roche, 1999, p. 488; see also Hart *et al.*, 1997). Participation and involvement are thus critical to children's continued growth in competence (Rogoff *et al.*, 1996).

Children's relationships with their adult collaborators vary with their interests, capacities, and the nature of the project. Using a conceptual *ladder of participation* developed by Arnstein (1969) during the height of the 1960s struggle for local control, Hart (1997) characterizes acceptable ways to involve children. At higher levels of participation, children initiate and direct projects, but even at minimum levels when projects are adult-initiated, children must be informed and feel a sense of ownership.

Hart proposes that it is not always necessary to seek the highest levels of participation; rather adults should 'establish the conditions that enable groups of children to work at whatever levels they may choose' (p. 41).

A theory-based approach to children's neighborhood placemaking

The literature suggests that children's neighborhood placemaking activities can enhance social and cognitive skills, while increasing participants' sense of connection to other people and to nature. By learning to influence their surroundings, children can develop greater environmental competence and—through activities that promote a sense of control—they may experience enhanced well-being and quality of life. While placemaking can benefit all children, those who are alienated from the rewards of mainstream society stand to gain the most by having 'a chance to struggle for a new situation that holds a large promise, while earning along the way the approval of one's parents, neighbors, friends, and, not least, oneself' (Coles, 1986, p. 35). To be effective, placemaking activities should be responsive to children's age, gender, social class, and geographic locale. Crucial to our approach, they should create scaffolds that encourage children to expand their competence—a principle that guides our rethinking of the traditional design charrette.

Charrettes as a methodology for children's neighborhood placemaking

The term *charrette* (meaning 'cart' in French) was first used in the 1800s to describe a unique learning experience for French children, who rode to school aboard horse-drawn carts. The children worked together enroute to solve their most difficult homework problems, and—since the assignment was due that morning—they worked collaborative and efficiently to produce a successful outcome. Later the term was adopted by architecture students at L'École des Beaux Arts who completed large, intricate drawings enroute to their final reviews. 'Often, the students would be drawing while the carts were moving, giving the word the meaning of a last-minute burst of activity to meet the deadline' (Sanoff, 2000, p. 48).

Whether these stories are true or not, charrettes have continued within the planning and design professions to stimulate creative thinking by directing attention toward a single issue within a

foreshortened time frame. The most successful charrettes bring factions of a community together to focus mental energy, heighten awareness, and develop consensus on a difficult, timely problem (Sanoff, 2000).

Design charrettes at the University of Washington

What I learned is that you can make a place better if you ask children for help! (Fifth grader.)

Two intergenerational charrettes were held during successive years at the University of Washington's College of Architecture and Urban Planning. The charrette methodology was designed by an interdisciplinary group of faculty in the college's Center for Environment, Education, and Design Studies (CEEDS). As part of our ongoing investigations of the relationship between environment and education, CEEDS faculty was interested in the charrette as a venue for connecting classroom learning to their community-based research and practice with children. Accordingly, we set out to develop a methodology that would incorporate schools as community partners, engaged in colearning with their university counterparts. We theorized that, unlike normal university coursework, charrettes can temporarily create a 'space apart' in which conventions are set aside and students actively create new social and spatial possibilities. By working with professionals, as well as with children and members of the community, university students would not only gain insights into new professional roles, but they would also serve as a scaffold between children and the adult world of placemaking. Even as participants' real-time relationships with one another became more egalitarian, the charrette assignment would engage them in imagining physical settings that exemplify the values of sociocultural inclusivity and ecological harmony.

CEEDS faculty identified as its audience schools that were planning, or constructing, new buildings. Not only does the construction process create an unusual moment for organizational change, it generates a budget for a public art installation. We hoped that the charrette would be a first step toward undertaking an installation in the following year that children and university students would collaboratively design and build. To create a robust foundation for this and other implementation projects, we developed an educational strategy that included preparatory work by children and university students. In the schools, university teaching assistants would equip children with design skills and engage

them in documenting their perceptions of their surroundings and in designing ideal places. In the university, graduate students would organize community constituents and develop a tool that would help these nondesigners make design decisions during the charrette. This preparatory work would increase children and community participants' capacities, while producing a scope of work for the charrette.

For the charrette itself, CEEDS faculty recruited students from the planning and design disciplines and also from nondesign disciplines, especially education, forest resources, and social work. We also included children as participants and dedicated one evening session to adult participation. The charrette would conclude with a public presentation opportunities for community constituents (including children), to provide their reactions to the presentation. Our overarching aim would be to create a learning environment in which novices and experts alike could contribute.

Understanding what charrettes are like

Both charrettes took place in a large interior atrium that serves as the college's circulation hub. Although many designers draw digitally nowadays, not even the faculty whose expertise is in digital representation have figured out how to reinvent the charrette's communal problem solving using computers. So all the drawings are done by hand. Design teams gather around drafting tables that are carried in from a nearby building or sit on rented folding chairs poring over large maps laid out on rented picnic tables. Giant easels are used to create an 'office' for each team, but there is little privacy as many passersby are observing the action, some even joining in. The atmosphere is one of perpetual motion and the pressure to finish on time, with periodic photographic documentation of activities adding another element of drama. Despite the open setting, the milieu is such that tools, books, radios, and other equipment can be left unguarded, intermixed with reams of used tracing paper and coffee cups.

The charrettes begin with an orientation for team leaders on Sunday evening that covers a range of issues from the nature of leadership to the site, scope of work, and participation requirements. On Monday afternoon, students join the team leaders for a continuation of the orientation, including a site tour led by community constituents. The orientation ends with a pre-evaluation in which team leaders and students establish individual learning goals for the charrette. Participants continue into the evening,

tackling their first task: problem definition. The next morning, a microphone is set up and chairs are rearranged so children can present their work. After a question-and-answer session, the children join the design teams to discuss the project. Work continues in the afternoon after the children leave and before adult community members arrive in the evening. By the end of this first day and a half, the university students have defined the problem and created a work plan. The third day is devoted to concept generation, the fourth day being devoted to production and photographing drawings for a slide presentation.

Preparation for the presentation occurs Friday morning, ending with post-evaluation sessions for university students and team leaders. Afterwards, they load large boards filed with 100 or so renderings (some exquisite, some rudimentary) and equipment for making the presentation into vans and head for the community site. After presenting their work and discussing it with community constituents, the design teams return to clean up and break down their temporary offices. A Saturday morning visit from the rental company removes the last traces of the charrette. However, the student leaders for each team continue working, scanning the drawings, writing text, and producing digital and hard-copy documentation of the event. Four months after the charrette, the client receives the documentation and, if all goes well, develops an implementation plan. From client identification to planning and follow up, this week-long activity extends over the entire year.

The case-study charrettes

Charrette 1 focused on three elementary school sites and their surrounding suburban neighborhoods; Charrette 2 focused on an urban village, including a commercial area, a high school and a public park that doubles as the high school's play field. Approximately half the children attending all four schools were ethnic and racial minorities; over half qualified for free lunch. However the Charrette 2 neighborhood was more affluent and the client, an organization that coordinated neighborhood planning, was dominated by business interests. Charrette 1 cost \$73,600, with \$1100 being contributed by the client and \$72,500 being contributed by the university; Charrette 2 cost \$65,000, with \$13,000 being contributed by the client and \$52,000 being contributed by the university.

Five 4th- and 5th-grade classes, or 109 children, from three elementary schools participated in Charrette 1, along with 60 university students and

eight team leaders. Although only one teacher made an effort to extend the charrette into the curriculum, preparatory activities were conducted by a CEEDS faculty member and two university teaching assistants during regular class periods over a ten-week period. Most of the children's design exposure occurred in these school-based activities, their participation in the charrette being only to present their work and see the final results. Conversely, just fifteen 9th to 12th graders participated in Charrette 2, along with 55 university students, six team leaders, and four architects who volunteered to mentor the adolescents. Preparatory activities for the high school students, recruited because they excelled in art, included one workshop at the university and eight at the high school, offered by graduate students as pull-out sessions over a four-week period. During the charrette, the adolescents also had their own team of architects and university students to help them create proposals.

A formative educational evaluation of the charrettes

This section draws on data from a formative evaluation to compare the differing perceptions of the charrettes among children and teachers, university students and team leaders, and community clients, as documented in written open-ended questionnaires. Quotes from all participants are presented verbatim, with the spelling, punctuation, and other marks appearing exactly as they were in their responses

Child/teacher reactions to charrette 1

Ten weeks after the charrette, the university team that had conducted the classroom sessions administered a questionnaire to 21 fourth graders and 76 fifth graders, which asked: What did you learn during the charrette? How can the charrette ideas come true? How should the charrette be next year? In the same class period, their teachers completed a similar questionnaire, which asked: what did your students learn during the charrette classroom activities? What did your students learn during the field-trip to the university? How should the charrette be next year?

Five categories emerged from the children and teacher's responses to the questions about what was learned: *Ecological awareness* (learned about nature, its importance, how to protect it), *design awareness* (learned about neighborhoods, their

structure, children's role as placemakers), *career awareness* (learned about what designers do, what goes on at the university, *basic skills* (learned about core curriculum subjects), and *no benefits* (didn't learn anything). The children's responses to the implementation question were grouped in four categories that denote who should take responsibility for the next steps: *Self/peers*, *self/peers + family/community*, *family/community*, and *global*. The children and teacher's responses to the question relating to future charrettes were grouped in three categories: *keep the charrette like it is*, *change the charrette*, *improve the design*.

A reference to one of the categories was considered to be a response, no matter what its length. For example, if one paragraph had several sentences referring to one category, that was counted as one response; if a single sentence or paragraph covered more than one category, each reference was counted as a response. Percentages were calculated based on the total responses to a question. While the children may have been limited by having to write their responses, writing about design had been an integral part of the curriculum. Thus the evaluation method was in keeping with what the children had been doing throughout the charrette.

The data suggest that children were more engaged than teachers by the content of the Charrette 1 curriculum. When asked what they learned, the children's responses fell largely into its three primary components, including ecological awareness (32%), design awareness (53%), and career exposure (13%), with 2% saying they did not learn anything. Despite literacy limitations, many responses were quite detailed as the following quotes indicate:

I learned about the outdoor space by looking at trees, and how pretty they look to people. The sight makes you feel relaxed. I learned that nature is very important, and sometimes looking at it makes you feel relaxed (fourth grader).

I learned how to make drawings. Also learned that how a big space can help you like. It can help you like by you can do plants. And I learned about the town. Also they gave us lots of benifit. I learned about the landmak about different drawings. I learned about different ideas about nature and wheelchair people (fifth grader).

I learn how architects do the maps to present what they're building (fifth grader).

In comparison, the teachers made no mention of ecological awareness, were much the same as the children in design awareness (58%), and were lower than the children in career exposure (8%). Almost

one third of teacher responses (31%) focused on basic skills. Except for one teacher, their responses were notably less specific than the children's in all areas as the following quotes show (See Table 1 for a comparison of the children and teacher's assessment of educational benefits):

The students enjoy the art/architectural aspect.

The campus tour inspired many of them in regards to higher education.

These skills were useful for some of the WASL [state test] math questions.

Teachers were also more negative than the children in their assessment of what future charrettes should be like. Somewhat more children than teachers thought the charrette should stay the same (33 and 27% respectively), but children were much less likely to say they would change it (41 and 73% respectively). All the teachers in this category were critical of the activity ('Teachers and charrette planners need *paid* time to collaborate on this curriculum. This cannot be an 'add on'). Some of the children's proposed changes, however, reflected a desire for increased exposure ('I would add more activtys like we also make are own little charrettes'). Notably, 17% of children focused on changing their designs, not the charrette ('I would improve by putting more parks with trees with trees, flowers, and more outdoors thing animals'). Most interesting, some of their suggestions were for re-creating the atrium as a traditional educational space ('I would make a room with a stage and chairs like a edutonium because the room was kind of squshed' or 'We should have some of others backboards too'). See Table 2 for a comparison of suggestions for future charrettes.

TABLE 1
Comparison of children and teacher's assessment of educational benefits

Educational benefits	Children n=96		Teachers n=5	
	Resp	%	Resp	%
Ecological awareness	42	32	0	0
Design awareness	70	53	7	58
Career awareness	17	13	1	8
Basic skills	0	0	4	31
No benefits	3	2	0	0
Total responses	132	100	12	100

Note: Percentages calculated as a fraction of the total responses.

TABLE 2

Comparison of children and teacher's suggestions for future charrettes

Suggestions	Children <i>n</i> =96		Teachers <i>n</i> =5	
	Resp	%	Resp	%
Keep the charrette like it is	47	33	3	27
Change the charrette	59	42	8	73
Improve the design	24	17	0	0
Total responses	142	100	11	100

Note: Percentages calculated as a fraction of the total responses.

Regrettably teachers were not asked how the charrette ideas might be implemented. However, they were emphatic that younger students should have been involved in lieu of their fifth grade students.

I feel this would be a more beneficial program for the students who will be enjoying the final product. The fifth graders won't be able to use the new site as frequently as the upcoming students. My class was disappointed in this and therefore did not put as much effort into the project.

One child specifically negates this notion ('As we move to 6th grade the younger kids will benefit from what we did in our drawing'), and the other children do not mention the issue. Instead, they provide suggestions for implementing the charrette designs. Thirteen percent place responsibility with themselves and their peers ('I would ask 4 donashins, raise money. I would help build and take care of the property'), 49% suggested expanding outwards to include family and community ('Have people vote for outdoor space. Ask people if they want to help. Ask people if they can donate money. I could make the invitation'), 17% do not take personal responsibility but look to family and community ('Get some money from the mayor or the relatives help us make the charrette come true'), and only 21% assign global responsibility ('The drawer/architects will be able to draw and send it to a construction business and. The architects will get the money from the top company'). See Table 3 for the children's assignment of responsibility for implementing the charrette.

Impressed with the children's feedback, CEEDS faculty and the district superintendent secured state funding so the next group of fifth graders could help 'make the charrette come true.' Each teacher was given paid preparation time and a budget to guide children in developing a marketing plan, but the teachers declined to participate, saying they had not been consulted in advance. In a second attempt at follow up, CEEDS faculty presented tea-

TABLE 3

Children's assignment of responsibility for implementation

Assignment of responsibility	Children <i>n</i> =97	
	Resp	%
Self/peers	13	13
Self/peers + family/community	51	49
Family/community	18	17
Global	22	21
Total responses	104	100

Note: Percentages calculated as a fraction of the total responses.

chers with open-ended ideas for constructing an art installation on the school grounds, offering many examples of how other teachers had incorporated such activities into the curriculum. No one elected the project as a classroom activity, deciding instead to involve children during recess.

Reactions to high school students' participation in charrette 2

Twenty-seven high school students attended a 2-hour pre-charrette workshop at the university, intended as a way of recruiting them for the charrette, but only 15 subsequently elected to participate in the preparatory workshops at the high school. The participation of this group, mostly a clique of girls, became increasingly erratic as interest waned or teachers refused to excuse them from regular classes. Just seven students showed up to present at the charrette. A teacher threatened to fail the student who was to be the spokesperson if she missed class, so another less involved student took her place. Only one foreign exchange student and the art teacher appeared for the design sessions and the public presentation.

After the charrette, an undergraduate student investigated the lack of adolescent participation as an independent study. Although she was unable to reconvene the high school students, she conducted open-ended interviews with the principal, art teacher, and university teaching assistant. The principal 'felt that the students were initially excited about participating in the charrette, but interest dwindled as the project progressed. He emphasized the importance of the students being exposed to the careers of architecture and landscape architecture, and felt that this offered them an opportunity that they would not normally have' (Stordahl, 2001, p. 3). The principal identified several impediments to the project's success, including transportation to the university, the mismatch between the university's

schedule and the high school's, and evening activities that conflicted with students' employment and athletic obligations.

Those interviewed agreed on the value of the charrette and expressed interest in an implementation project after the school construction is complete. However, the principal noted that more preparation time is needed to embed charrette activities into a class curriculum or service requirement, that students need to receive grades for their work ('As the charrette activities were set up this year, there were no consequences for not showing up'), and that the 'right kids' need to be recruited. 'When asked what could have been done to draw the interest of at risk teens, [he] exclaimed, 'That would have been really tough,' stressing that part of the reason that they are at risk is because they are frequently truant. The planning and execution of work with this section of the student population would have to be very deliberate" (Stordahl, 2001, p. 6). In contrast, the art teacher said that using his art class would have resulted in an ethnically diverse group, adding that 'it might have been good for them to see students from the University of Washington who were from diverse backgrounds'.

University student/team leader reactions to both charrettes

Before and after Charrette 1, an evaluator administered an open-ended written questionnaire to 41 university students and six team leaders; the same questionnaire was administered to 47 students and five team leaders before and after Charrette 2. The pre-charrette questionnaire provided a list of charrette learning objectives followed by a space for participants to enter their individual learning objectives. Post-charrette questions included: Which assignment did you find most engaging? Which assignment did you find least engaging? How well did the charrette further your personal learning goals? How well was your team able to communicate with and meet the needs of the community? What suggestions do you have for improving the charrette? In addition, participants rated the charrette as a learning experience on a 5-point Likert scale, with 5 being 'excellent' and 1 being 'poor'. The evaluator's analysis was further informed by a group discussion after the questionnaires were complete.

Six categories, positive and negative, emerged from the responses (neutral responses were rated as positive): *Design skills* (reactions to improving design abilities), *organization* (reactions to the schedule, conflicts, time pressures), *learning by example*

(reactions to working hands-on with professionals), *interdisciplinary teamwork* (reactions to working across disciplines), *community practice* (reactions to working with/serving a community client), *children's participation* (reactions to working with children).

Similar to the analysis of child/teacher data, a response was considered to be a single reference to one of the categories, no matter what its length. Mirroring the diverse perceptions of children and teachers, 'student experiences may be described as being very much like the story of the four blind men who each discovered a different part of an elephant' (Borgford-Parnell, 2001, p. 7). Because of this variability in experience, the percentage of positive and negative responses were calculated within categories rather than as a percentage of the total responses.

The least salient dimension of the Charrette 1 experience was community practice, accounting for only 7% of the responses (with 88% being positive). Children's participation also ranked low accounting for 8% (with 94% being positive). They were somewhat more positive about their exposure to design skills (18% of the responses with 71% being positive) and even more positive about their experience of interdisciplinary team work (20% of the responses with 82% being positive).

Community practice was a strong feature of Charrette 2, accounting for 23% of students' responses (with 55% being positive), on par with design skills (with 59% being positive). Interdisciplinary teamwork was less salient than in Charrette 1, accounting for just 15% of responses (with 60% being positive). Its least salient aspect was children's participation, accounting for only 2% of the responses (with 67% being positive). Learning by example was not very salient in either charrette, accounting for only 4% and 7% of the responses in Charrettes 1 and 2 respectively. However Charrette 1 was experienced more positively in this regard, accounting for 82% of the positive reactions compared to Charrette 2, where 55% of the reactions were negative.

For both charrettes, students rated organization as a major, primarily negative concern. For Charrette 1, organization accounted for 43% of the total responses (88% being negative); for Charrette 2, organization accounted for 30% of the responses (81% being negative). Because of the timing of the charrettes, 'students reported conflicts with their schedules as being the single most frustrating aspect of their experiences and one that affected virtually every aspect of the charrette' (Borgford-Parnell, 2001, p. 8). While a number of students identified

the compressed time frame of the charrettes as beneficial ('Making decisions quickly helped us be more creative'), clearly a difficult challenge of this methodology is to organize a ritual that is responsive to students' diverse needs and abilities (See Tables 4 and 5 for university students' reactions to Charrettes 1 and 2 respectively).

In general, team leaders were more satisfied with both charrettes, especially Charrette 2, which was less effective for students. Students gave Charrette 1 a rating of 3.47, while team leaders rated it 4.14. Students gave Charrette 2 a rating of 3, but team leaders rated it 4.5. Considering Charrette 1, team leaders were similar to students in seeing organization as the most salient issue (32% of the responses compared to students' 43%, with 70% being negative). They were also similar in seeing interdisciplinary teamwork as salient (25% of the responses compared to students' 20%, with 73% being positive in comparison to students' 82%). Neither group perceived community practice to be salient (8% for team leaders compared to students' 7%), but whereas students' reactions were 88% positive, team leaders' reactions were 63% negative. In like manner, design skills were moderately important to each group (12% for team leaders compared to students' 18%), but students had more positive reactions (71%) than did team leaders (50%). Children's participation is where the two groups diverged the

most; this issue accounted for 12% of team leaders' responses and 8% of students, but while students' reactions were 94% positive, team leaders' reactions were 58% negative (See Table 6 for team leaders' reactions to Charrette 1).

In Charrette 2, organization is again the most salient issue for team leaders (29% compared to students' 30%), but it accounts for only 61% of their negative responses compared to students' 81%. Children's participation is the least salient aspect for both groups, with the team leaders providing no responses related to this characteristic. The relevance of community practice to the two groups is quite similar, accounting for 25% of team leaders' responses (compared to students' 23%), with 63% of the responses being positive (compared to students' 55%). Design skills are also similar, accounting for 21% of team leaders' responses (compared to students' 23%), with 62% being positive (compared to students' 59%). However, it is in respect to learning by example that team leaders and students most diverge; this characteristic accounted for 13% of team leaders' responses and 6% of students, but while team leaders' reactions were 75% positive, students' reactions were 55% negative (See Table 7 for team leaders' reactions to Charrette 2).

The differences between students and team leaders suggest that they had conflicting expectations:

TABLE 4
University students' reactions to charrette 1 characteristics n = 41

Charrette characteristics	Positive	%	Negative	%	Total	%
Design skills	27	71	11	29	38	18
Organization	11	12	81	88	92	43
Learning by example	7	78	2	22	9	4
Interdisciplinary teamwork	36	82	8	18	44	20
Community practice	14	88	2	13	16	7
Working with children	16	94	1	6	17	8
Grand total	111	51	105	49	216	100

Note: Percentages calculated as a fraction of each category.

TABLE 5
University students' reactions to charrette 2 characteristics n = 47

Charrette characteristics	Positive	%	Negative	%	Total	%
Design skills	36	59	25	41	61	23
Organization	15	19	65	81	80	30
Learning by example	9	45	11	55	20	7
Interdisciplinary teamwork	24	60	16	40	40	15
Community practice	34	55	28	45	62	23
Working with children	4	67	2	33	6	2
Grand total	122	45	147	55	269	100

Note: Percentages calculated as a fraction of each category.

TABLE 6
Team leaders' reactions to charrette 1 characteristics n = 6

Charrette characteristics	Positive	%	Negative	%	Total	%
Design skills	6	50	6	50	12	12
Organization	10	30	23	70	33	32
Learning by example	11	85	2	15	13	13
Interdisciplinary teamwork	19	73	7	27	26	25
Community practice	3	38	5	63	8	8
Working with children	5	42	7	58	12	12
Grand total	54	52	50	48	104	100

Note: Percentages calculated as a fraction of each category.

TABLE 7
Team leaders' reactions to charrette 2 characteristics n = 5

Charrette characteristics	Positive	%	Negative	%	Total	%
Design skills	8	62	5	38	13	21
Organization	7	39	11	61	18	29
Learning by example	6	75	2	25	8	13
Interdisciplinary teamwork	7	88	1	13	8	13
Community practice	10	63	6	38	16	25
Working with children	0	0	0	0	0	0
Grand total	38	60	25	40	63	100

Note: Percentages calculated as a fraction of each category.

'The team leaders seemed to view the charrette as an opportunity, for both themselves and the students, to practice the skills and apply the knowledge that each person already possessed' (Borgford-Parnell, 2001, p. 13), but students came to the charrette expecting to learn new skills. 'Although several students reported that the team leaders were good models of professionalism, many more students saw this modeling role as lacking any real importance to their learning' (Borgford-Parnell, 2001, p. 13).

The community client's reactions to charrette 2

The evaluator administered an open-ended questionnaire to six community residents and a city official: Questions included: what were the strengths/weaknesses of each aspect of the charrette (pre-planning, visioning, presentation, design alternatives)? What are your suggestions for improving the charrette? Which other persons or groups should be involved? What would your ideal future relationship be with CEEDS? In addition, participants rated each aspect of the charrette on a five-point Likert scale, with 5 being 'excellent' and 1 being 'poor'. The evaluator's analysis was further informed by a group discussion after the questionnaires were complete. Although the clients' mean rating of all aspects of the char-

rette was 4.0, their experience was clouded by not understanding what a charrette is, what their roles should be, and what outcomes to expect. Seeing aerial photos of the neighborhood 'generated a much better understanding of what they were getting into but could have happened much sooner'. However in a 'Catch 22', a consultant could not be hired to photograph the neighborhood until the clients signed a contract, which was delayed because people did not understand what they were contracting for. The clients also wanted more time to process ideas, both during the planning stage and at the presentation, and several persons expressed concern about the lack of high school participation. Finally, there were conflicting opinions about whether the charrette should have been generative or focused on concrete recommendations for such elements as street furniture or traffic lights. While some persons felt they should have hired a consultant to make sure the designs addressed predetermined needs, others thought 'the final presentation seem to free the thinking processes of the community and it would have been nice to have a similar sort of presentation earlier in their process [of neighborhood planning], which would generate much more community interest and involvement'. From an educational perspective charrettes are necessarily generative, but some

persons in this group had difficulty grasping that the students were there as learners, not employees.

Despite these limitations, the clients were in agreement that they had achieved their goal of getting fundable ideas that 'could be immediately incorporated and implemented'.

Summary of findings

In the findings are eloquent lessons of the challenges and opportunities inherent in bringing people together from differing generations, disciplinary backgrounds, and institutions to create something that goes beyond their individual experiences. Charrette 1 speaks most directly to children's neighborhood placemaking. The findings indicate that children were more generative and outer-directed than their teachers. They were more engaged by the curriculum content, retained more complex ideas, and envisioned an implementation phase that readily incorporated family and community. They showed a beginning awareness of the relationship between their work and the larger community, indicating a budding ecological and civic sensibility. In contrast, teachers were more focused on preconceived ideas of children's capacities and the conventional skills they might acquire, expressing concerns about recognition, compensation, and time commitment. In blocking the plan for moving toward an implementation in the community, they missed an opportunity to nurture the children's beginning awareness of being civic actors in a world beyond the school.

Charrette 2 has considerably less to say about children's placemaking, because it failed to engage the adolescents. This failure can be attributed in part to the inability of those closest to the students to see their potential contributions and constraints. As with many enrichment opportunities, the invitation to participate was directed at a select group of students (middle-class white girls), rather than at those marginalized adolescents who perhaps most needed the opportunity to demonstrate their competence. Even for those few students who did participate, the realities of their lives in school and beyond were not adequately accommodated.

At the next generational level are marked differences in the perceptions of university students and team leaders. Across both charrettes, the data indicate that team leaders were focused primarily on creating high-quality designs. Understandably, these experts had a personal stake in producing drawings that would reflect well on their own abilities. An emphasis on the outcome (magnified in Charrette 2

by having a paying client) seemed to lessen team leaders' investment in the interdisciplinary/community practice/intergenerational benefits of the charrette, which were more paramount in the students' minds. In a few cases, team leaders expressed explicit dissatisfaction with children's involvement, seeing it as a distraction, and ambivalence about the added complexity of the community interface.

Community members' evaluations of Charrette 2 forefront the challenges of creating common understandings between professionals and lay people within time and budgetary constraints. Still, the responses of the community members suggest a greater openness to new ideas than those of the teachers and team leaders. Some community members commented, for example, on the importance of high school students' participation and also spoke to the generative possibilities of being exposed to new perspectives.

For all groups, organization was foremost. While a compressed time frame is a critical dimension of a charrette, it puts significant strain on participants. In this case, teachers had to rearrange their delivery of curriculum, high school students had to miss coursework and after-school activities, and university students had to juggle the intense demands of the charrettes with other academic and life responsibilities. The only persons who were relatively free of competing pressures were the team leaders, who has dedicated a block of time to these events.

Lessons from intergenerational design charrettes

The charrettes should not be underestimated

Professors, teachers, principals, and parents need to be more open-minded about what constitutes learning. [A professor] recently said, 'One cannot tell someone how to design. Learning to design is like learning to ride a bike.' Simply put, one must experience the process of designing for oneself. For a variety of reasons, [the high school] students missed some of the most dynamic aspects of the design charrette: the collaboration of variously talented individuals, the experimentation of conceptual ideas and the subsequent crumpling of trace, the frenzied production stage, the pride in the presentation and final products, and the knowledge that, by coming together with others for a short period of time, they can make a difference in the future of their community. The importance of the charrette experience should not be underestimated (Stordahl, 2001, p. 8).

We set out to use the design charrette to bring children into the public domain as partners in neighborhood placemaking. We chose this venue because it creates a space apart where power relations can be temporarily reordered as participants use visualization, dialogue—and collective fatigue—to envision a community's future. The theoretical support for our work suggested that children's participation in neighborhood placemaking would heighten their social and environmental awareness, while helping them gain a sense of control over their surroundings and achieve their right to participate in public decision-making. We believed that children's efforts needed to be appropriate, developmentally and contextually, and linked to adult intentions for a school or community's future. Because a charrette brings together many constituents, we thought it might provide a scaffold to guide children into the adult world of neighborhood placemaking. In a social life that increasingly establishes boundaries among groups (Jenks, 2000), we wished to create collaborations that would blur the distinctions between generations, skill sets, disciplines, and institutions—to encourage connections between children and adults, as well as across class, race, and institutional lines. 'The imagery of social conversation and participation is central to the rethinking of citizenship' (Roche, 1999, p. 475), and such dialogue requires interdependence and the creation of egalitarian relationships (Minow, 1990). Although orchestrating such collaborations had many pitfalls, there is ample evidence of success.

First, the charrettes supported our notion that placemaking can 'help children to gain a sense of responsibility for a particular community and culture while increasing their knowledge about how that place fits into the larger ecosystem' (Sutton, 1996, pp. 205). The children, as well as the university students, developed heightened awareness by attempting to design a project that met the needs of different people, while respecting nature. Expressing an ethic of care and connection to the larger world, one fifth grader wrote: 'I learned about how bad it is to build stuff on the animals home. I learned about that nature could help the world alive so don't run their world and there home. If you ruin their home and your going to kill them and kill yourself and others'. The university students responded to the children's awareness, expressing joy in designing projects that would 'bring people and the landscape together'. They also responded to their community clients, and this real-world connection seemed to add meaning to their work ('It was good

to listen to what the community people had to say for our design. ...It was motivating to have that connection to the community').

In addition to enhancing their outer awareness, the charrettes heightened participants' self-awareness by bringing children onto a public stage, alongside their hardworking role models, the university students. Together they struggled with questions of right and wrong, imagining a possible future and claiming a space for themselves in that future. Such real and imagined appropriation of space is a vital component of childhood (Marcus, 1995) that can increase children's sense of ownership and safety. 'Place-related projects are fascinating for young people because they provide a framework for thinking critically about their own visions of the future, and because they offer a concrete means to gain some sense of control over that future' (Sutton, 1996, pp. 204). The children's possible futures were validated as the university students and team leaders listened to their presentations and asked them to explain their ideas in greater detail. In the implementation phase of Charrette 1, children's ideas were visibly affirmed as their small sketches became enormous forms fabricated by the university students and their professors. The children seem to have an appropriate sense of needing adult input to realize their ideas, while also seeing themselves as active agents. As one fourth grader explained, children need to 'get helpers. ...Get your parents the maior, Dr X [the superintendent]. Then you watch, learn, and pitch in'.

Second, the charrettes informed our notion of how children develop environmental competence. They acquired design skills by studying their surroundings, identifying its strengths and weaknesses, and making esthetic choices through drawings and models (Figures 1 and 2 provide evidence of these skills). In addition, they persuasively communicated their designs to adults and then fielded wide-ranging questions about their communities. Children in Charrette 1 progressed from design to implementation, collaborating with the university students to make a visible improvement to their school grounds (see Figure 3). As the art installation proceeded, both children and university students received direct feedback on how ideas are reshaped by collaboration, as well as by the site, budget, schedule, skill levels, and even the weather. The success of these design and construction activities would suggest that participants have attained some of the knowledge, skills, and courage to influence their surroundings and assume meaningful roles in their school community—all aspects of



FIGURE 1. Fifth grader's cognitive map of an asphalt-filled neighborhood.

environmental competence (Hart, 1979; Horelli, 1998, 2001).

The children's enhanced competence can possibly increase their chances for being included in future placemaking decisions, especially with respect to maintaining and expanding the art installation. Children's participation depends upon adults' willingness to share power (Rivlin & Wolfe, 1985), and the extent to which adults are inclusive of children's input varies with 'how the adults in specific social settings conceptualize children and childhood' (Mayall, 1994, p. 116). If adults view children as developmentally unformed, they will expand their caretaking role, while limiting children's autonomy and freedom to manage their surroundings. It is possible that the evidence of environmental competence generated by the charrettes can help counter teachers' tendency to view children as *becoming* rather than as *being* competent social agents.

Finally, the charrettes supported our notion that children's involvement in neighborhood placemaking can contribute to the struggle for social justice. Because a charrette brings many constituents to-

gether, it would seem uniquely suited for bringing children's voices into the public domain. Although placemaking can be exclusionary, when practiced within a transformative, democratic framework, 'each act of placemaking embodies a vision of who we are and offers a hope of what we want to be as individuals and as groups who share a place in the world' (Schneekloth & Shibley, 1995, p. 191). The charrettes engaged children—typically marginalized from even the most democratic placemaking processes—in re-envisioning the inhumane aspects of their communities (Figure 4 for example, shows one child's idea for re-creating his asphalt-filled neighborhood). However, empowering children to enter the world of adult placemaking requires shifts in educational approaches that emphasize the transmission of knowledge and skills as a flow-down process from expert to novice. Alternatives to such traditional pedagogy include experiential learning theories, which suggest that students should not merely *acquire* knowledge but rather should *create* it through their transactions with the world (Kolb, 1984), and constructivist theories, which favor construction of knowledge by the learner over instruction by the teacher (Kahn, 1999).

The pedagogy of the design charrettes both reflected and differed from experiential and constructivist theories. Because design is focused upon conceiving and realizing something new (Cross, 1983), design pedagogy encourages the exploration of many possible solutions. 'Beginning with situations that are at least in part uncertain, ill defined, complex, and incoherent, designers *construct* and impose a coherence of their own' (Schön, 1987 p. 42), which has inner, as well as outer, ramifications. Design is simultaneously a cognitive process that changes how the designer sees the world and an action-taking one that potentially reshapes that world. Because designers intervene in how various peoples share the Earth, design involves cultural understandings and ethical judgements (Tuan, 1989). In the charrettes, the university students might be seen as 'social interlocutors' for 'neophytes' (the children), helping them use culturally embedded tools and symbols to navigate an indeterminate situation and assume a productive role (Vygotsky, 1978, as cited in Glassman, 2001) in reshaping their community. While critics might view this as top-down mentoring (Glassman, 2001), a more egalitarian relationship seemed to be facilitated by the university students' own status as neophytes in relation to the team leaders, as well as by the charrette itself where even experts must search for coherence.

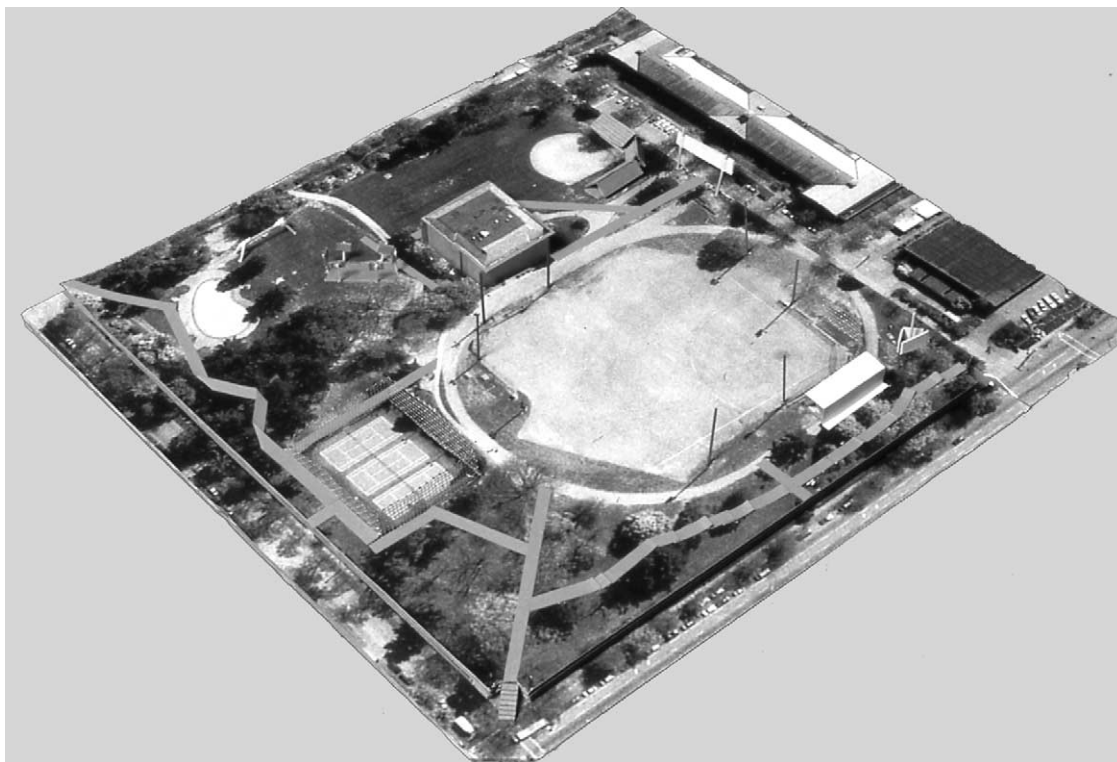


FIGURE 2. High school students' model of a proposed playfield.



FIGURE 3. Public art installation designed and built by children and university students.



FIGURE 4. Fourth grader's drawing of an ideal neighborhood.

The pedagogy of the charrettes also diverged from experiential and constructivist approaches in how the project was framed. In these pedagogies, 'it is expected that the activities of the children will eventually coalesce around a topic that is of interest to them. The topic need not be of any relevance to the demands of the larger social community' (Glassman, 2001, discussing Dewey, 1916). Because the very premise of the charrettes was to engage children in dialogue with the larger social community, the charrettes were used to position children within an adult-initiated dialogue. Through an integration of novices and experts—made possible through institutional support from the university, school, and community—the charrettes brought together diverse voices, socially constructing knowledge and laying the groundwork for communal action (Schneekloth & Shibley, 1995).

Becoming more open-minded about learning

Despite the successes of the charrettes, they revealed formidable barriers to establishing new social relationships, realizing new ways of learning, and overcoming institutional hierarchies. At every level, participants expressed confusion about their social roles, especially the university students who were simultaneously the mentees of team leaders and mentors of younger participants ('People didn't have clearly defined roles or assignments' or 'It would have been nice to have a brief meeting of the student mentors as a group to go over charrette goals and mentor roles'). Our experiences show that careful planning, orchestration, and persistence are required to cultivate new social roles. Most adults have little practice in facil-

itating young people's participation, and indeed may be professionally socialized to maintain hierarchical expert/novice power relationships. 'In any society, the relationships between generations are governed by generational contracts (Alanen & Bardy, 1991), which set out adults' understanding of the division of labor in that society, and the permitted and required activities of children' (Mayall, 1994, p. 118). Although the nature of these intergenerational contracts varies by setting, they are particularly challenging in school contexts because 'schools remain the worlds of teachers in which children are temporary guests' (Wyness, 1999, p. 386). The same can be said of university students or community clients' temporal status in the worlds of faculty.

In both charrettes, adults defined the children's appropriate place as the school grounds, where behavior can be monitored. This ghettoizing of children made their place a small, less significant, part of the university students' design assignment. In Charrette 1, not only did the children's focus on the school grounds contradict their initial interest in making the city more pedestrian friendly, but the university students' more daring responses to the children's ideas for the grounds were rejected because of safety standards. When funding was secured for children to market the university students' design ideas for a pedestrian-friendly city, the teachers were unwilling to usher children out of their domain onto a public stage. In Charrette 2, the adolescents' use of the broader neighborhood only surfaced after their formal presentation. Given the young people's relegation to school grounds, it is not so surprising that neither the university students nor the team leaders saw them as a salient aspect of these community-focused charrettes.

Our findings also reinforce the difficulty of achieving new approaches to learning. We conceived the charrette as a transformative space—an unusual event that would take participants out of their everyday roles, expose them to differing perspectives, and engage them in experimenting with new ideas and relationships. We found that all the constituents needed more preparation before being catapulted into this situation. Teachers needed indepth exposure to participative, community-based design pedagogy because 'teachers who don't have a true understanding of the design process cannot adequately coach students to create their own design solutions to a problem, be it imaginary or real' (Davis *et al.*, 1997, p. 107). Team leaders, who all had experience with design charrettes (including ones

governed by hierarchical relationships) needed time to unlearn old habits and buy into new ones. And just as university students needed time to understand their dual roles as neophytes and social interlocutors, community persons needed time to balance their rights as clients with their responsibilities as educators.

Within this challenging social situation, all the groups needed more preparedness for dealing with the ambiguities of the design process—for doing something that cannot be taught but must be experienced. All the groups needed a deeper understanding of design as a cognitive and social process, not simply as an action or artifact. Yet having the emotional space to nurture such preparedness is almost impossible in today's fast-moving society, with its escalating focus on accountability and external measures of performance.

This latter point brings us to the third obstacle: institutional hierarchies. To have a substantial effect on educational culture and community practice, the charrettes—or any children's placemaking strategy—require a transformation of institutional power structures. Although colleges and universities nationwide are seeking to partner with schools to guarantee their pool of qualified applicants, such partnerships must cut across inflexible reward structures, as well as the practical realities of how time is organized. Particular challenges exist in connecting placemaking activities within schools to ongoing community development efforts because U.S. school districts, which are independent construction authorities, are often in an adversarial position with local planning agencies and residents. The school and its students may be seen as an intrusive bureaucracy rather than as a resource that can contribute to neighborhood revitalization. And most school staff, who are narrowly focused on student achievement, are unprepared to engage with community institutions on the broader context of children's development, particularly in neighborhoods that may not be their own. Although we hoped that the charrettes would give university students a peek into a transformed universe and inspire them to begin working toward new institutional structures, this expectation proved illusive.

Theorizing a context for children's civic activism

Fundamental to our theory of children's placemaking was an interest in locating individual agency within a context of institutional support. In designing developmentally appropriate strategies, we be-

gan with the ladder of participation first conceptualized by Arnstein (1969) as a means of bringing disempowered adults into the community planning process, and later reinvented by Hart (1997) to theorize children's participation in that process. As we struggled with the charrette's principle of bringing diverse constituents together, the metaphor of a ladder—with its directional overtones—became less relevant than that of a scaffold. A scaffold is a supporting framework. Its lower members bear more load and must be more stable; its upper members can be lighter, freer. Whereas a ladder can be treacherous, typically accommodating one person on narrow steps, a scaffold has secure platforms where many persons can sit, stand, or be lifted to the next level.

As a result of the evaluation, we have gained greater clarity on the interdependent levels of adult and institutional support that are needed to scaffold children's civic activism (See Figure 5). At the base are the national and local policies that determine funding priorities and methods of accountability for placemaking projects. Next are the institutions (universities, schools, community organizations, city agencies) that distribute placemaking power through incentives and reward structures. Next are the placemaking experts (faculty, teachers, practitioners, community organizers, city officials) who use their privileged social positions to establish placemaking norms. Then come adults in the

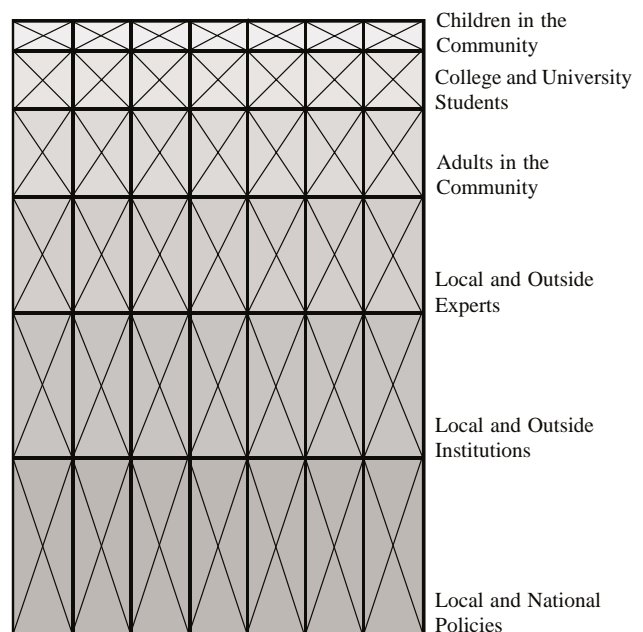


FIGURE 5. A conceptual scaffold of children's civic activism.

community (residents, business owners, service-delivery persons) who have situated knowledge about the place under consideration. Then come university students who are not yet professionally socialized to be 'servants of what is rather than shapers of what might be' (Cronin, 1993, referring to John W. Gardner); they have just enough skill and irreverence to provoke social change. At the very top are children who have their own situated knowledge about the place, as well as almost unlimited freedom to see the world anew. Within the structural stability of this scaffold, children can access the complex support they need to begin entering, and assuming effective roles as, engaged citizens.

Notes

Sharon Egretta Sutton, Ph.D., FAIA is Professor of Architecture and Urban Design, Adjunct Professor of Social Works and Director of the Center for Environment, Education, and Design Studies (CEEDS) at the University of Washington. Her research and practice focus on design as a means of developing children's civic activism and stewardship.

Susan P. Kemp, Ph.D. is Associate Professor of Social Work, Associate Decon for Professional Degree Programs in Social Work and Faculty Affiliate in CEEDS at the University of Washington. Her research and practice focus on community-based and environmental interventions with vulnerable children and families.

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Correspondence and requests for further information on the charrette evaluation should be addressed to Sharon Egretta Sutton, Department of Architecture, Box 355720, University of Washington, Seattle, Washington 98195-5720, U.S.A. E-mail: sesut@u.washington.edu.

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